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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

July 14, 1995

EX PARTE

William F. Caton Acting Secretary Federal Communications Commission Mail Stop 1170 1919 M Street, N.W., Room 222 Washington, D.C. 20554

Dear Mr. Caton:

Re: CC Docket No. 94-54 - Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services

Yesterday, James Tuthill, Vice President, External Affairs, Steve Sidore, Director of Network Engineering, Pacific Bell Mobile Services, and I met with Ruth Milkman, Senior Legal Advisor to Chairman Hundt, and David Siddall, Legal Advisor to Commissioner Ness, to discuss issues summarized in the attached documents. Please associate this material with the above-referenced proceeding.

We are submitting two copies of this notice in accordance with Section 1.1206(a)(1) of the Commission's Rules.

Please stamp and return the provided copy to confirm your receipt. Please contact me should you have any questions or require additional information concerning this matter.

Sincerely,

CC:

Ruth Milkman David Siddall

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THE COMMISSION SHOULD ADOPT A ROAMING RULE

COMMISSION HELP WILL BE NECESSARY TO ASSIST PCS's LAUNCH

July 12, 1995



The Industry May Not Voluntarily Promote Roaming



- Large Cellular and PCS Companies Plan to Create National Networks:
 - » AT&T/McCAW
 - » AIRTOUCH/BELL ATLANTIC/NYNEX/US WEST
 - » WIRELESS CO.
- Customers of Regional and Small Providers May Be Unable to Access These Networks for Competitive Reasons.

A Broad Roaming Policy Should Be Adopted



- The Existing Part 22 Rule, 22.901Should Be Extended to All CMRS Providers.
- This Would Allow Roaming on Cellular Analog Systems and Other PCS Systems.
- Additionally, the Rule Should Provide That Roaming Is Available on Fair and Nondiscriminatory Terms and Conditions.
- This Is Consistent With Sections 201 and 202.

CMRS to CMRS Interconnection Is Not Necessary.

Roaming Scenario 1 - Originating Call Only



Subscriber's Capability - Roaming subscribers are only allowed to originate calls.

Contract Arrangements:

- The subscribers' home network and visited network must have agreements on the terms and conditions to compensate one another for network usage.
- The exchange of billing information becomes part of the billing settlements process.

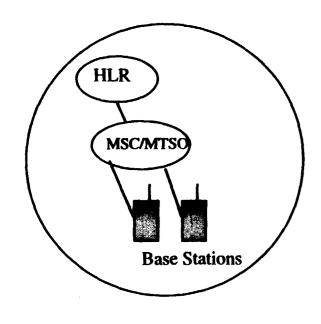
Technology Requirements:

- The only technical requirement is that the subscribers' handset has an air interface compatible with the visited network.
- This may require a dual mode handset. **Dual mode handset** availability (i.e. AMPS/PCS1900) is scheduled for 1Q 1996.

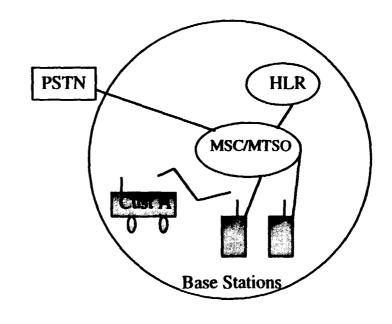
Technical requirements are no different than used by cellular today

Roaming Scenario 1 Originating Calls Only





Network A



Network B

No CMRS to CMRS interconnection Required

Roaming Scenario 2 - Originating and Terminating Calls, Same Network Technology



Subscriber's Capability - Roaming subscribers can originate calls and have calls delivered to them.

Contract Arrangements: Same as Scenerio 1.

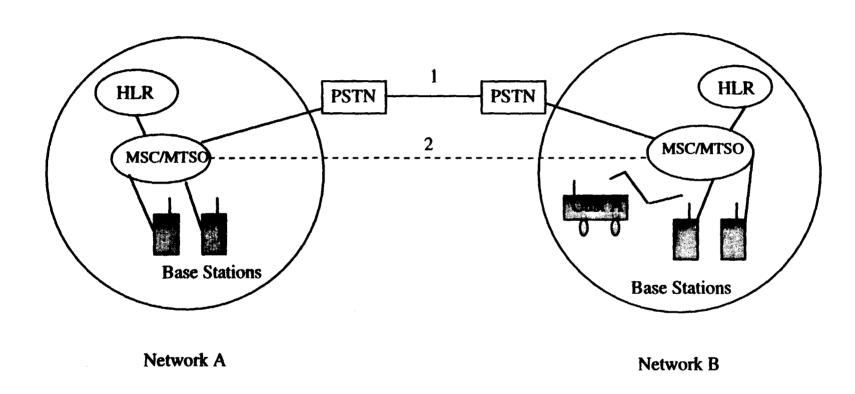
Technology Requirements:

- The subscribers' handset has the same requirements as Scenerio 1.
- To enable roaming subscribers to receive calls their home network must be updated with the identification of the visited MSC/MTSO.
- Home Location Registration (HLR) for full roaming can be accomplished via several mechanisms which cellular uses today (i.e. IS-41, X.25, SS7).
- Call completion to the roaming subscriber is handled no differently than cellular today via the PSTN to the visited network.

Technical requirements are no different than used by Cellular today

Roaming Scenario 2 - Originating & Terminating Calls Same Network Technology





- 1. Terminating calls are delivered via the PSTN.
- 2. Signaling information exchange via an available national signaling network.

Roaming Scenario 3 - Originating and Terminating Calls, Different Network Technology PACIFIC THELLO

Subscriber's Capability - Roaming subscribers can originate calls and have calls delivered to them.

Contract Arrangements: Same as Scenerio 1.

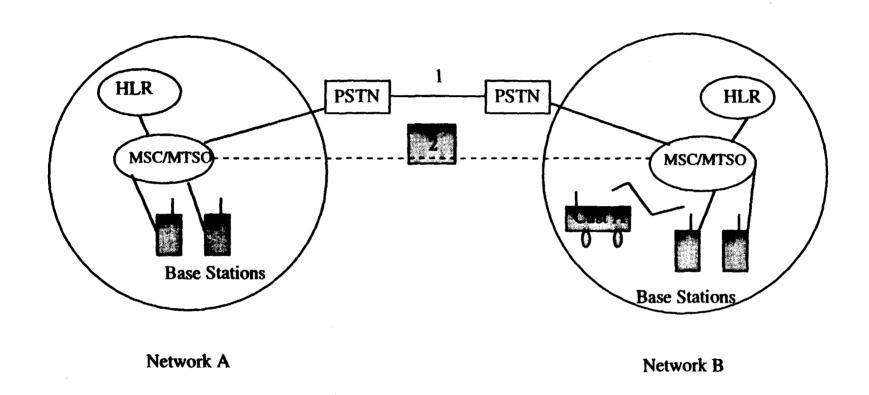
Technology Requirements:

- The subscribers' handset has the same requirements as Scenerio 1.
- The subscribers' home network is updated the same way as identified in Scenerio 2.
- •Call completion to the roaming subscriber is the same as Scenerio 2
- Protocol conversion will be needed to allow two networks with different technologies (i.e. PCS1900 and AMPS/IS41) to exchange network information messages.
- •An AMPS/TDMA dual mode handset is available today.
- An AMPS/PCS1900 dual mode handset is scheduled for 1Q 1996.
- An IS-41/PCS1900 protocol converter is scheduled for 2Q 1996.

Technical requirements are no different than used by Cellular today

Roaming Scenario 3 - Originating & Terminating Calls Different Network Technology





- 1. Terminating calls are delivered via the PSTN.
- 2. Signaling information exchange via an available national signaling network with a protocol converter.

The Sequence of Events that Support Roaming



- 1. A Roaming Agreement is agreed upon and upgraded as needed.
- 2. The companies establish a billing settlements process. (A third party clearinghouse may be used such as GTE using the Cybernet system)
- 3. Billing procedures and processes are developed and implemented.
- 4. Roaming Agreement Database activated for roaming originated calls.
- 5. If the roaming subscriber is allowed to receive calls technical details on how the two networks will exchange registration and call delivery information must be specified. (For example, both companies must agree on what national signaling network will be used to exchange network message information.)

These are the same processes used by Cellular today